

## PLA Technical Data sheet

### DESCRIPTION

Polylactic Acid is a Bio polymer of vegetable origin, which is completely recyclable, very versatile with good mechanical and elastic properties.

Having a shiny finish it is ideal for producing attractive objects that are pleasant to the touch.

It also offers excellent resistance to ultraviolet light without variations in colour.

Simple to print, it can also be sanded without difficulty.

This is a very versatile material that can be used in many fields of application, especially for producing **detailed objects with an aesthetically-pleasing glossy surface.**

### PRINTING MODES

- Extruder Temperature: 190°-210°
- Bed Printing Temperature: 0°/50°
- Suggested printing speed: 60-80 mm/sec

### APPLICATIONS

PLA is a thermoplastic filament especially suitable 3D Printing Prototyping Technologies FFF (Fused Filament Fabrication).

Following are tests carried out to proof the features and properties of the material:

Property Test Condition	Standard	Unit	Values
<b>Mechanical Properties</b>			
Tensile Strength	ASTM D882	MPa	53
Tensile yield strength	ASTM D882	MPa	60
Tensile modulus	ASTM D882	GPa	3,05
Tensile Elongation	ASTM D882	%	6
Notched izod impact	ASTM D256	J/m	16
<b>Thermal Properties</b>			
Heat distortion temperature	ASTM E2092	°C	55
<b>Other Properties</b>			
Specific gravity	ASTM D792	g/cc	1,24
Mel flow rate - MFR	ASTM D1238	g/10 min	6

### SUPPLY FORM

PLA is supplied as Filaments.

External filament diameter is 1,73 mm (diameter tolerances + 0.02/-0,03 mm; ovality tolerances: max 0,05 mm).

It has to be kept in its original packaging. Avoid direct exposure to sunlight.

### Olivetti S.p.A.